Silene spaldingii Wats.

Spaldings' silene Caryophyllaceae (Pink Family)

Status: State Threatened, USFWS Species of Concern

Rank: G2S2

General Description: An herbaceous perennial, 8-24 inches tall, typically with one stem, but sometimes several, each bearing 4 to 7 pairs of leaves 2 to 3 inches in length. The light green foliage and stem are lightly to more typically densely covered with sticky hairs. The cream-colored flowers are arranged in a spiral at the top of the stem. The outer, green portion of the flower forms a tube ca. 1/2 inch long with ten distinct veins running its length. The flower consists of 5 petals, each with a long narrow "claw" that is largely concealed by the calyx tube and a very short "blade," or flared portion at the summit of the claw. Four (sometimes as many as 6) short petal-like appendages are attached inside and just below each blade.

Identification Tips: *S. spaldingii* is extremely glandular; individuals are often covered with wind blown debris. The foliage is an unusual pale green which tends to contrast well with the background color of the surrounding dried grasses. *S. douglasii* occurs with *S. spaldingii* but has narrower stems and leaves and is rarely glandular. The stems of *S. douglasii* also tend to be decumbent, while those of *S. spaldingii* are generally erect.

Phenology: The species begins to flower in mid- to late July, with some individuals still flowering by early September. Most other forbs within its habitat have finished flowering when *S. spaldingii* is just hitting its peak. A majority of individuals have developed young fruits by mid- to late August.

Range: Regional endemic; eastern WA, northeast OR, ID, and western MT. In WA, it occurs in the Blue Mountains and Columbia Basin physiographic provinces in Asotin, Lincoln, Spokane and Whitman counties.

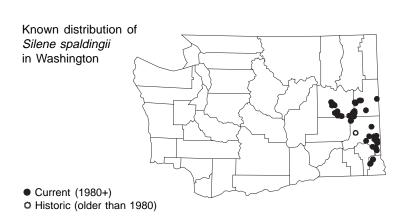
Habitat: *S. spaldingii* occurs primarily within open grasslands with a minor shrub component and occasionally with scattered conifers. It is found most commonly in the Idaho fescue/snowberry association of Daubenmire (1970) at elevations of 1900-3050 feet. These sites are typically dominated by Idaho fescue and have sparse cover of snowberry (*Symphoricarpos albus*). Total vegetative cover is greater

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Habitat (continued): than 100%. Some of these sites occur in a mosaic of grassland and ponderosa pine forest. Populations have been found on all aspects, although there seems to be a preference for slopes which face north. On drier sites, the species can be found on the bluebunch wheatgrass/ Idaho fescue association. Associated species include prairiesmoke (*Geum triflorum*), sticky geranium (*Geranium viscosissimum*), Wood's rose (*Rosa woodsii*), white stoneseed (*Lithospermum ruderale*), yarrow (*Achillea millefolium*), northwest cinquefoil (*Potentilla gracilis*), and hawkweed (*Hieracium* sp.).

Ecology: *S. spaldingii* generally occurs in native grasslands that are in reasonably good ecological condition, although populations have persisted in areas that have had moderate grazing pressure. Populations tend to be quite small and are currently quite fragmented, raising questions about their long-term viability. Fire may have historically played a role in maintaining habitat particularly in sites that are interspersed with ponderosa pine forest.

State Status Comments: Populations are generally very small and isolated and may not be viable. Most sites have active threats present.

Inventory Needs: Additional inventory work should be conducted around the periphery of the known range of the species, particularly along the ecotone between the forested and non-forested portions of the channeled scablands. Remnant habitat should also be inventoried.

Threats and Management Concerns: Much of the historically suitable habitat has been lost through conversion or degradation. Loss of additional habitat needs to be avoided. A conservative approach to land uses which have the potential to further degrade the habitat, such as grazing and recreational activities, is recommended within the known remaining sites. Weed control is also an important concern. Control should be accomplished by means that will not adversely affect *S. spaldingii*.

References:

Hitchcock, C. L., A. Cronquist, M. Ownbey, and J.W. Thompson. 1964. Vascular Plants of the Pacific Northwest, Part 2: Salicaceae to Saxifragaceae. University of Washington Press, Seattle. 597 pp.